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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,231

03/09/2004

Marc Husemann

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7590

10/13/2011

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EXAMINER

NERANGIS, VICKEY MARIE

ART UNIT

PAPER NUMBER

1762

MAIL DATE

DELIVERY MODE

10/13/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,231	<b>Applicant(s)</b> HUSEMANN ET AL.	
	<b>Examiner</b> Vickey Nerangis	<b>Art Unit</b> 1762	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 1,2,5-9,11-13 and 15-32 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 1,2,5-9,11-13 and 15-32 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

### **DETAILED ACTION**

1. All outstanding rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on 7/8/2011.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
3. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on 7/8/2011. In particular, claim 1 has narrowed the amount range of tackifying resin. Thus, the following action is properly made final.

### ***Claim Rejections - 35 USC § 103***

4. Claims 1, 2, 5-9, 11-13, 15, 17, 18, 22-29, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma '094 (JP 10-140094, machine translation) in view of Yang (WO 92/01761).

Azuma '094 discloses a flame retardant tacky film and tape (pressure sensitive adhesive) comprising 100 parts by weight (pbw) acrylic based polymer that is copolymerized with vinyl monomers such as other acrylates as well as N-vinyl pyrrolidones, acrylamides, anhydrides, acrylonitrile, and the like (paragraphs 0017) and 5-100 parts by weight of ammonium polyphosphate flame retardant (paragraph 0017) having molecular weight of 200-1000 (paragraph 0026). Note that the Japanese abstract is incorrect regarding the amount of ammonium polyphosphate and that the amount is indeed 5-100 parts by weight as described in the machine translation.

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Azuma '094 teaches the addition of a tackifier such as terpenes *inter alia* (paragraph 0063) but fails to teach the amount of tackifier.

Yang discloses pressure sensitive adhesives based on acrylic copolymers comprising a tackifying resin (abstract) and teaches that suitable tackifying resins include rosin esters or terpenes *inter alia* (page 9, line 8 to page 10, line 10) in an amount of up to 150 parts by weight per 100 parts by weight of the acrylic copolymer (page 10, lines 11-15).

Given that Azuma '094 discloses the use of tackifiers in its adhesive tape and further given that pressure sensitive adhesives can include tackifiers like claimed in an amount of up to 150 parts by weight as taught by Yang, it would have been obvious to one of ordinary skill in the art to utilize Azuma '094's tackifier in claimed amounts, absent a showing of unexpected and surprising results.

5. Claims 16 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma '094 (JP 10-140094, Everaerts (US 5,648,425)).

The discussion with respect to Azuma '094 and Yang in paragraph 4 above is incorporated here by reference.

Azuma '094 discloses the use of crosslinking monomers to improve cohesive strength (paragraph 0025), however, it fails to disclose that the crosslinking monomers are photoinitiated.

Everaerts discloses acrylic pressure sensitive adhesives and teaches that photocrosslinkers such as benzophenone-crosslinking agents are added to enhance cohesive strength (col. 6, lines 22-26).

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Given that Azuma '094 discloses that its pressure sensitive adhesive is photopolymerized and crosslinked and further given that photocrosslinkers including benzophenone compounds are useful in pressure sensitive adhesives as taught by Everaerts, it would have been obvious to one of ordinary skill in the art to utilize a crosslinking monomer like claimed.

6. Claims 19-21, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma '094 (JP 10-140094, machine translation) in view of Yang (WO 92/01761) and further in view of Parsons (US 5,851,663).

The discussion with respect to Azuma '094 and Yang in paragraph 4 above is incorporated here by reference.

Azuma '094 and Yang fail to disclose that the adhesive composition for pressure sensitive adhesive is impregnated into a carrier tape such as a nonwoven or woven composite and/or fabric and that the pressure sensitive adhesive is prepared by melt processing such as by extrusion.

Parsons discloses a flame-retardant, acrylic-based pressure sensitive adhesive tape and teaches that tape backings include polyester (like taught by Azuma '094) and cloth and that the adhesive composition for pressure sensitive adhesive is applied by hot melting coating or extrusion (col. 3, lines 34-67).

Given that all of Azuma '094, Yang, and Parsons are drawn to the same field of endeavor (i.e., acrylic-based pressure sensitive adhesive) and further given that such materials are known to be applied to backings such as cloth by melt processing methods including extrusion when desired as taught by Parsons, it would have been obvious to one of ordinary skill in the art to

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apply the adhesive composition of Azuma '094 and Yang onto a cloth backing by melt processing methods.

***Response to Arguments***

7. Applicant's arguments filed 7/8/2011 have been fully considered but they are moot in view of the new grounds of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701.

The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

vn

/Vickey Nerangis/  
Primary Examiner, Art Unit 1762